

In the Specification:

On page 1, beginning at line 12, please replace the paragraph with the following:

Valve repair is currently done in open surgical procedures as described, for example, by F. Maisano, et al. in their article entitled "The double-orifice technique as a standardized approach to treat mitral regurgitation due to severe myxomatous disease" which appeared in European Journal of Cardio-thoracic Surgery, Vol. 17 (2000) 201-205. Cumbersome suture management, knot tying, pain and long recovery time are inherent to such open surgical procedures. It now goes without saying that minimally invasive surgery is the preferred procedure, having allowed surgeons to perform procedures with less pain and disability than open surgical procedures. Tissue-connector apparatus and methods usable in such minimally invasive surgery procedures have recently been disclosed in U.S. patent applications Series Nos. 09/089,884, now U.S. Patent No. 6,607,541, and 09/090,305 both filed June 3, 1998 and Serial Nos. 09/259,705, now U.S. Patent No. 6,514,265, and 09/260,623, now U.S. Patent No. 6,613,059, both filed March 1, 2000.

On page 4, beginning at line 15, please replace the paragraph with the following:

The clip assembly 20 according to this embodiment may be referred to as the double-arm clip assembly, characterized as having a clip 22 of a self-closing type with two end points each connected through a flexible member 24 such as a suture to a tissue penetrating needle 25 (as disclosed, for example, in aforementioned U.S. patent applications Serial Nos. 09/259,705, now U.S. Patent No. 6,514,265, and 09/260,623, now U.S. Patent No. 6,613,059, both filed March 1, 2000, both of which are herein incorporated by reference). Each of the needles 25 has a tissue-piercing sharp point and is connected to a corresponding one of the flexible members 24. As shown more clearly in Fig. 2, the two end points of the clip 22 are each

provided with and directly connected to a release mechanism 23 such that it can be released easily from the flexible members 24 and from being constrained to remain in its generally U-shaped open configuration.

On page 4, beginning at line 27 and continuing through page 5, line 18, please replace the paragraph with the following:

The clip 22, or a surgical fastener, of the so-called self-closing type may be one disclosed in aforementioned U.S. patent applications Series Nos. 09/089,884, now U.S. Patent No. 6,607,541, and 09/090,305 both filed June 3, 1998 (herein also incorporated by reference), as well as in aforementioned U.S. patent applications Serial Nos. 09/259,705, now U.S. Patent No. 6,514,265, and 09/260,623, now U.S. Patent No. 6,613,059, characterized as having two end points, being generally U-shaped when in an open configuration (as shown in Figs. 1 and 2), being naturally in a closed configuration (state or condition) and being elastic (or pseudoelastic, but herein broadly characterized as being "elastic") so as to tend to return to the closed configuration by reducing the separation distance between its end points when forced into an open configuration. As disclosed in aforementioned U.S. patent application[[s]] Series Nos. 09/089,884, now U.S. Patent No. 6,607,541, and 09/090,305, such a clip 22 may comprise a deformable wire made of a shape memory alloy such as a nickel titanium based alloy (nitinol). It is also known that the alloy may include additional elements, depending on the desired yield strength of the material or the temperature at which particular pseudoelastic or shape transformation characteristics occur. When the clip 22 is in its closed configuration (not shown) with no external restraining force thereupon, it may be in a completely closed loop with its end points in a side-by-side or overlapping orientation, the wire being looped by more than 360°. The diameter of the wire for the clip 22 and the diameter of the loop when it is in the closed configuration may be selected, depending on the application, and do not limit the scope of the invention.

On page 7, beginning at line 27 and continuing through page 8, line 15, please replace the paragraph with the following:

The invention was described above by way of only one example but this example is not intended to limit the scope of the invention. Many modifications and variations are possible within the scope of the invention. For example, although the use of a clip assembly having two needles each connected to a corresponding one of the two end points of a generally U-shaped clip was disclosed, use may be made under certain circumstances of a simpler single-arm clip assembly 20' shown in Fig. 5 and described, for example, in aforementioned U.S. patent applications Serial Nos. 09/089,884, now U.S. Patent No. 6,607,541, and 09/090,305, having only one needle 25 attached through a flexible member 24 and a release mechanism 23 to one of the two end points of a clip 22'. Such a single-arm clip assembly 20' may be used similarly, as described above in connection with the double-arm clip assembly 20 shown in Figs. 1 and 2, except that the clip 22' is provided with a stopper 26 at the other of its two end points not connected to the flexible member 24 for keeping the clip 22' in its generally U-shaped open configuration. After the needle 25 is caused to penetrate both leaflets, as shown in Fig. 6, the clip 22' can be caused to pull the two leaflets together as the flexible member 24 is pulled, the stopper 26 serving to locate the clip 22' across the leaflets.

On page 9, beginning at line 14, please replace the paragraph with the following:

Although the clips 22 and 22', when constrained to an open configuration before they are released from the flexible member 24, are described as being generally U-shaped, this description is intended to be interpreted broadly. As should be clear from the intended function of the clips 22 and 22', their open configuration may look more like a C or a J than a U. The release mechanisms 23, described above as serving to release the connection between the clip 22 or 22' and the flexible members 24 and to release the clip 22 or 22' from its forced open configuration, may be structured as disclosed in aforementioned U.S. patent application Series

No. 09/260,623, now U.S. Patent No. 6,613,059, but their structure is not intended to limit the scope of the invention.

In the Drawings:

The attached six replacement sheets of drawings replace all previous sheets of drawings and are submitted in response to the Notice of Allowablility dated August 20, 2003. Regarding replacement sheet of drawings numbered 6/6, this sheet includes changes to FIG. 7 submitted on May 30, 2003. Attached FIG. 7 is believed to better conform with original FIG. 7 and the specification, which states that "clip assembly 20" is characterized as having ... two self closing clips 22' as shown in and explained with reference to FIG. 5" (page 8, lines 18-20). Accordingly, the undersigned requests that attached FIG. 7 replace the FIG. 7 submitted on May 30, 2003 and all drawings attached hereto be accepted.

Attachment: Six Replacement Sheets of Drawings